

- **Schlarmann, Eric: Smooth classifying spaces for differential K-theory (SR1 c)**

For a generalized cohomology theory on the category of smooth manifolds, a differential refinement is a functor that in addition to the topology takes into account geometric information. In this talk, we will see how to construct a differential extension of topological K-theory based on smooth Banach manifold models for the spaces that appear in the K-theory spectrum, together with a refined notion of homotopy. This is part of my ongoing PhD project at the university of Augsburg.